

A NEW ALOE FROM MADAGASCAR

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(With Plates XXIV and XXV)

Aloe rauhii Reynolds. Species nova, forsitan in Subsect. *Parvae* pertinet; nulli alii arcte affinis; sectionem propriam constituere debet, ut videtur.

Planta parva, succulenta, acaulescens, caespitosa. *Folio* c. 16—20, rosulata, lanceolato-deltaidea, 7—10 cm. longa, basi 15—20 mm. lata, sensim acuminata, patentia; *supra* canaliculata, viridula, copiose maculata; *subtus* convexa, copiose maculata; marginibus dentibus albidis cartilagineis 5 mm. longis, 1—2 mm. distantibus armata.

Inflorescentia simplex, c. 30 cm. alta, interdum 1-ramosa. *Pedunculus* basi plano-convexus et 4 mm. latus; vacue bracteatus, bracteis albidis ovato-acutis 6 mm. longis, 3 mm. latis. *Racemus* cylindricus leviter acuminatus, laxe c. 16-floribus, c. 7—8 cm. longus, 4 cm. diametro. *Bracteae* ovato-acutae, 4.5 mm. longae, 2 mm. latae. *Pedicelli* 10 mm. longi. *Perianthium* pallide coccineum, c. 25 mm. longum, basi breviter stipitatum, circa ovarium 5 mm. diametro; *segmenta exteriora* libera, obscure 3-nervata. *Antherae* 0—1 mm. exsertae. *Stigma* demum 1 mm. exsertum. *Ovarium* 4.5 mm. longum, 2 mm. diametro.

Hab. Madagascar, Tulear Province, 10 km. SE. of Ampanihy on sandstone rocks in dense bush, fl. 3 October 1961, W. Rauh 7594 holotype (K), isotype (HEID); plant coll. Rauh, cult. Mbabane, Swaziland, fl. 15 September 1963, Rauh et Reynolds 10114 (PRE).

This very distinctive and charming little new species is named after Professor Dr. W. Rauh (Heidelberg University, W. Germany), who discovered it in October 1961 on sandstone rocks, in dense bush about 10 km. SE. of Ampanihy, near the Tulear-Ambovombe main road in the dry south-western region of Madagascar. Professor Rauh found plants growing in groups with rosettes averaging 10 cm. across, and with inflorescences that were mostly simple although an occasional inflorescence was found with a short branch arising from below the middle.

A. rauhii does not appear to be closely allied to any other known species of Aloe in Madagascar, although in leaf characters only there may be some affinity with *A. bellatula* Reynolds, but this has longer narrower leaves and campanulate flowers only 13 mm. long.

In *A. rauhii* the perianth is 25 mm. long, slightly constricted trigonously above the ovary, thence slightly enlarging to the mouth, with outer segments

free to base, which separates it from other species in Madagascar. In floral characters *A. rauhii* might be allied to *A. deltoideodonta*, but the latter is a considerably larger plant, having very different leaves and a branched inflorescence.

I am greatly indebted to Professor Rauh for plants, photographs and much data concerning *A. rauhii* and other species of *Aloe* in Madagascar.

DESCRIPTION

Plant succulent, acaulescent, or with very short stem, forming dense groups, with rosettes averaging 10 cm. across.

Leaves up to 20, densely rosulate, lanceolate-deltoid, 7—10 cm. long, 15—20 mm. broad at base, gradually narrowing to an acute apex, the younger leaves suberectly spreading, the older spreading; *upper surface* canaliculate, grey-green, sometimes with brownish tinge, with numerous narrowly "H"-shaped spots scattered irregularly throughout; *lower surface* rounded, otherwise as the upper; *margins* with white cartilaginous edge armed with very small white cartilaginous deltoid teeth about .5 mm. long, 1—2 mm. apart.

Inflorescence simple, or rarely with a short branch low down, 30 cm. tall.

Peduncle basally plano-convex and 4 mm. broad, terete upwards, brownish-maroon with a whitish waxlike bloom, with a few sterile bracts that are white, scarious semiamplexicaul, 6 mm. long, 3 mm. broad, 3—5-nerved.

Raceme cylindric slightly acuminate, laxly 12—18-flowered, about 7 cm. long, 4 cm. diam., open flowers nutant to pendulous.

Bracts ovate-acute, long-pointed, 4—5 mm. long, 2 mm. broad, white, scarious, 3—5-nerved.

Pedicels slender, 10 mm. long, the colour of the perianth.

Perianth rose-scarlet, paler at mouth, 25 mm. long, shortly stipitate at base, 5 mm. diam. across the ovary, very slightly constricted above the ovary, thence very slightly enlarging trigonously to an open mouth; *outer segments* free to base, obscurely 3-nerved; *inner segments* free, broader than the outer, with a scarlet keel throughout, the apices more obtuse and slightly more spreading than the outer.

Filaments lemon-yellow, filiform-flattened, the 3 inner narrower and lengthening before the 3 outer with their *anthers* in turn exserted 0—1 mm. *Style* lemon-yellow with *stigma* at length exserted 1 mm.

Ovary pale olive, 4.5 mm. long, 2 mm. diam.

Fruit 10—15 mm. long, 7 mm. diam. at middle.



PLATE XXIV. *Aloe rauhii* Reynolds. Plants $\times 3/10$ in natural habitat, 10 km. SE. of Ampanihy, Tulear Prov., Southern Madagascar.

Photo—Prof. W. Rauh.

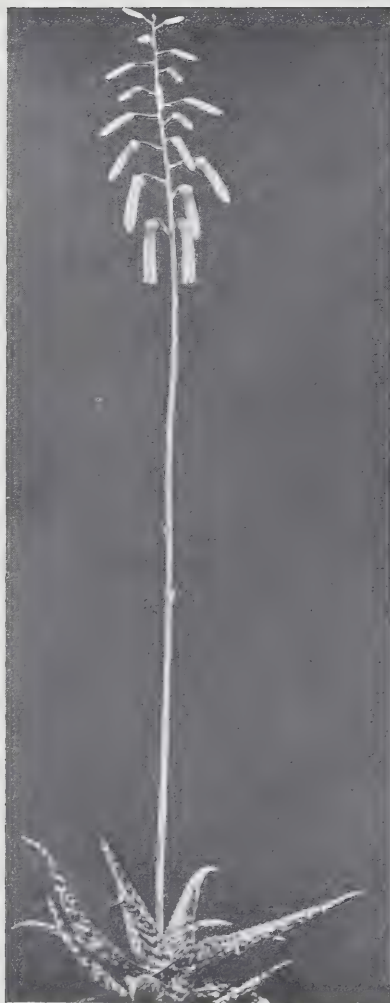


Fig. 1

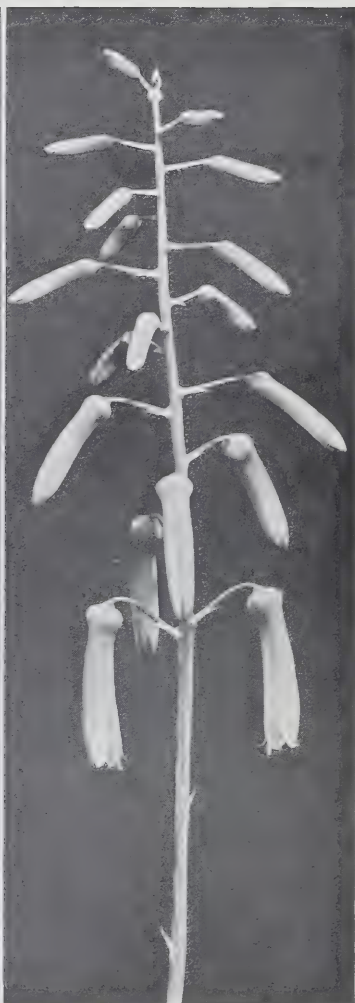


Fig. 2

PLATE XXV. *Aloe rauhii* Reynolds.

Fig. 1. Cultivated plant $\times 1/2$.

Fig. 2. Raceme $\times 1/1$.

Photos—Prof. W. Rauh.